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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/922,438

08/03/2001

Kenneth A. Epstein

56111USA3A  
(7780.631US01)

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05/13/2003

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EXAMINER

PRITCHETT, JOSHUA L

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/922,438

Applicant(s)

EPSTEIN ET AL.

Examiner

Joshua L Pritchett

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 17-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau. (PCT-Rule 17-2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6.
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of claims 1-16 in Paper No. 9 is acknowledged. The traversal is on the ground(s) that a duplicate search would be involved for both groups of claims. This is not found persuasive because the cutting tool limitation of claim 16 is located in the preamble of the claim and is therefore given no patentable weight, thereby completely eliminating the process of making portion required by a search of claims 17-24 from claims 1-16. The applicant further argues that scope of Groups I and II are the same. The examiner disagrees because Group II requires a method of making that is not in the claim limitations of Group I. The applicant further argues that to restrict this case would place undue burden on the applicant to submit payment of a separate filing fee for examination of the nonelected claims. Monetary concerns are not considered undue burden to the applicant when the restriction is proper, the applicant is allowed one invention per application and the examiner feels that there are two distinct inventions in the present case.

The requirement is still deemed proper and is therefore made FINAL.

### *Claim Objections*

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Claim 10 is objected to because of the following informalities: claim 10 depends from claim 10. Claim 10 will be examined as if it depended from claim 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein (WO 01/31393) in view of Hayashi (US 6,204,903).

Regarding claims 1-2, 12 and 16, Epstein teaches a light directing film having an x-axis, a y-axis and a z-axis, the film (324) comprising a first structured surface (332) and an opposing surface (between 324 and 326), the structured surface comprising a plurality of elongated prismatic structures (322) thereon (Fig. 3), the elongated prismatic structures extending generally along the x-axis (Fig. 3) and having a height along the z-axis (Fig. 3), the height of the prismatic structure (322) varying along the x-axis in a repeating period (Fig. 3). The x-axis in Fig. 3 of Epstein is considered to be from left to right across the page and the z-axis is considered to be from bottom to top along the page. Epstein does not explicitly teach spacing of the prismatic

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structures along the y-axis. Hayashi teaches the use of a repeating elongated prismatic structure with spacing along the y-axis (Fig. 4). The x-axis of Fig. 4 of Hayashi is considered to be from left to right along the plane of the page, the y-axis is considered to be from front to back in the three-dimensional representation of Fig. 4 and the z-axis is considered to be from the bottom to the top of the page. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the y-axis spacing of Hayashi in the Epstein invention for the purpose of increase the surface area of the prismatic structures.

Regarding claim 3, Epstein teaches the wave period being a sine wave (Fig. 3). The repeating period of Epstein can be considered to be a rough sine wave in that the wave goes up and down and to the same maximum and minimum.

Regarding claims 4 and 5, Epstein teaches the prismatic structure includes randomness on along the z-axis and the randomness superimposed on the repeating period (Fig. 3). Layer 316 of Epstein introduces randomness to the along the z-axis of the Epstein invention and layer 316 is superimposed on prismatic structures 322.

Regarding claim 6, Epstein teaches the varying height of the prismatic structure provides diffusion in an XZ plane defined by the x-axis and the z-axis (Fig. 4). The dashed line extension of 32 is light the diffused through the prismatic structure 322 of Epstein. Any light traveling in the plane of the page would be in the XZ plane according to the interpretation of Epstein.

Regarding claim 9, Epstein teaches the invention as claimed but lacks reference to variable spacing along the y-axis. Hayashi teaches variable spacing of the prismatic structures along the y-axis (Fig. 4). It would have been obvious to a person of ordinary skill in the art at

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the time the invention was made to equip Epstein with variable spacing along the y-axis as taught by Hayashi for the purpose of reducing moiré interference patterns in the film.

Regarding claims 10 and 13, Epstein teaches a reflective coating (320) on the light reflecting film (322).

Regarding claims 11 and 14, Epstein teaches the reflective coating is a metallic coating (page 6 line 16).

Regarding claim 15, Epstein teaches the addition of a polarizer (326).

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein in view of Hayashi as applied to claim 1 above, and further in view of Fong (US 6,280,063).

Epstein teaches that the typical view will orient the screen at an angle about 30 degrees from horizontal (page 7 lines 3-5), therefore it would have been obvious to have the collimated incident light of the ELDIM EZ contact the film at an angle of 34 degrees because it is a typical well known value. Epstein lacks reference to the claimed vertical viewing angle. Fong teaches a vertical viewing angle of greater than 20 degrees (col. 5 line 31). One would assume that the ELDIM EZ would provide results consistent with other optical measuring devices and therefore the use of the ELDIM EZ is not considered by the examiner to have patentable weight as a claim limitation for claims 7 and 8. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Epstein invention have a vertical viewing angle of greater than 20 degrees as taught by Fong for the purpose of reducing the glare seen by the user.

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***Conclusion***

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cobb (US 5,919,551) teaches an optical film with variable pitch.

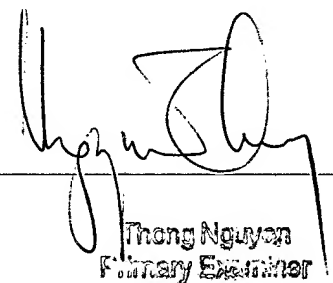
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917.

The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703-308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JLP  
May 12, 2003



Thong Nguyen  
Primary Examiner